

REMARKS

Withdrawal of the previous prior art rejections and obviousness-type double patenting rejection is respectfully acknowledged.

The Amendments

Non-elected claims 11-16 are canceled pursuant to the restriction requirement. The amendments do not narrow the broadest scope of the claims and/or are not made for purposes of patentability.

It is submitted that the above amendments would put the application in condition for allowance or materially reduce or simplify the issues for appeal. The amendments do not raise new issues or present new matter and do not present additional. The amendments have been made to cancel non-elected subject matter pursuant to the restriction requirement. Since the traversal of the restriction requirement was still ongoing, the amendments were not earlier presented. Accordingly, it is submitted that the requested amendments should be entered.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

The Rejection under 35 U.S.C. §112

The rejection of claims 1-2 and 6-8 under 35 U.S.C. §112, second paragraph, the sole

remaining rejection, is respectfully traversed.

Applicants note that the Office Action does not dispute applicants' point that one of ordinary skill in the art would know the meaning and the metes and bounds, within reason, of the terms "polymerizable group" and "mesogenic group." To the contrary, these are well known terms of art to one of ordinary skill in this art. Such is evidenced by the prior art, including that of record, making extensive use of these terms; see, e.g., Onishi patent, U.S. Patent No. 5,750,213, at, e.g., col. 7, line 57, to col. 8, line 46. The continued rejection appears to be made on the basis that these claim terms are very broad and that they may "reach-through" to "polymerizable groups" and "mesogenic groups" which have not yet been discovered. Applicants respectfully submit that neither the breadth of a claim term nor its potential for "reaching-through" to cover undiscovered embodiments provides a valid basis for rejection under 35 U.S.C. §112, second paragraph.

Regarding breadth of the claim, MPEP §2173.04 makes very clear that: "Breadth of a claim is not to be equated with indefiniteness. In re Miller, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph." Although the scope of the "polymerizable group" and "mesogenic group" terms is broad, there is no question that one of ordinary skill in the art would reasonably know or can reasonably determine what that scope is. This has not even been disputed in the Office Action. See also MPEP §2173.02, stating: "In reviewing a claim for compliance with 35 U.S.C. 112, second paragraph, the examiner must consider the claim as a whole to determine whether the claim apprises one of ordinary skill in the art of its scope and, therefore, serves the notice function required by 35 U.S.C. 112, second paragraph, by providing clear warning

to others as to what constitutes infringement of the patent. See, e.g., Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). Even if the claims are very broad and encompass undiscovered embodiments, their scope is clear to one of ordinary skill in the art and it would be clear to others what embodiments would constitute infringement. One of ordinary skill in the art can readily distinguish what groups are "polymerizable" or not and what groups are "mesogenic" or not. This is all that is required under 35 U.S.C. §112, second paragraph.

Regarding the "reach-through" argument, applicants can find no basis in the law, case law, rules or MPEP that a claim which potentially "reaches-through" to as yet undiscovered embodiments is indefinite under 35 U.S.C. §112, second paragraph. Valid issued patent claims are full of terms which potentially cover as yet undiscovered embodiments; for example, claims containing terms such as, plastic, solvent, polymer, substrate, etc.. This does not render them indefinite. Even if it is discovered later, one of ordinary skill in the art would still know whether it meets or does not meet the terms of the claim. In the instant case, one of ordinary skill in this art can reasonably determine whether a group is a "polymerizable group" or a "mesogenic group", whether or not the group is a currently known one or is later discovered.

There has been some theoretical discussion by commentators regarding "reach-through claims" in regards to their validity under 35 U.S.C. §112, first paragraph, and for utility. But, to the undersigned's knowledge, none of that discussion relates to supporting a 35 U.S.C. §112, second paragraph, rejection for indefiniteness on the basis that a claim term encompasses as yet undiscovered embodiments. Further, all of that discussion was made in the context of biotech-based claims and the situations unique to that technology, which is not

at issue here. Accordingly, applicants do not see my applicability of the “reach through” arguments.

For the above reasons, it is urged that the Office Action fails to provide adequate reasons for supporting rejection of the claims under 35 U.S.C. §112, second paragraph, or otherwise.

Additionally, although this was not stated as part of the rejection, applicants note that the terms "polymerizable group" and "mesogenic group" are, in some respect, functional terms rather than defining an exact structure. To the extent this fact may be providing some impetus for the rejection, applicants respectfully point out that the law is well-established that claim terms are not improper merely because they are functional terms. See, e.g., In re Swinehart, 169 USPQ 226 (CCPA 1971).

For completeness purposes, applicants repeat below their arguments made previously, which still apply in addition to the above.

The standard for definiteness under 35 U.S.C. §112, second paragraph, is set forth in terms of reasonableness and in terms of consideration of both the prior art and the description provided in the application. Thus, the claims need not be absolutely definite but are acceptable when reasonably definite to one of ordinary skill in the art. See, for example, In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236 (CCPA 1971); and, Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1385, 231 USPQ 81, 94-95 (Fed. Cir. 1986).

As to both terms, the rejection appears to be based on the assertion that the terms are not limited to specifically defined structures and, thus, apparently, one of ordinary skill in the art would not find the terms reasonably definite. However, there is no assertion that one of ordinary skill in the art would not know the meaning of the terms "polymerizable group" and "mesogenic group." Applicants respectfully urge that the meaning of these terms would have

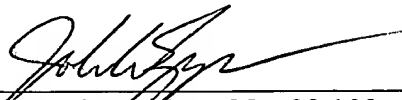
been reasonably definite to one of ordinary skill in the art, considering their knowledge of the art. One of ordinary skill in the art would be able to reasonably determine the metes and bounds of these terms and the claims containing them, i.e., they would be able to reasonably determine whether a group is a polymerizable group or a mesogenic group. In fact, these terms are terms of art, are extensively used in this art area and have a clear meaning in this art. The art of polymerizable mesogenic materials, particularly liquid crystal materials, is well established and one of ordinary skill in this art is well versed in the nature of polymerizable groups and mesogenic groups and how to provide compounds containing them. Their known meaning is exemplified by the Onishi patent (U.S. Patent No. 5,750,213, patented before applicants' priority date) of record herein. See, e.g., col. 7, line 57, to col. 8, line 46, of Onishi, describing the nature of polymerizable groups and mesogen groups in compounds for making liquid crystal polymers. The prior art is replete with similar such references.

For all of the above reasons, it is urged that the instant claims are reasonably definite to one of ordinary skill in the art and, thus, the rejection under 35 U.S.C. §112, second paragraph, should be withdrawn.

It is submitted that the application is in condition for allowance. But the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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